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## 2014 Achievement Awards



## 2014 VACo Achievement Awards

Deadline: June 2, 2014

### Application Form

All applications must include the following information. Separate applications must be submitted for each eligible program. **Deadline: June 2, 2014.**

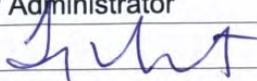
#### Program Information

Locality Loudoun County  
Program Title Eastern Loudoun Transportation Study: Keeping Loudoun Moving  
Program Category Transportation

#### Contact Information

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#### Signature of county administrator or chief administrative officer

Name Tim Hemstreet  
Title County Administrator  
Signature 

## Call for Entries

# Eastern Loudoun Transportation Study

Keeping Loudoun Moving





# **Eastern Loudoun Transportation Study Keeping Loudoun Moving**

## **Summary**



# **Eastern Loudoun Transportation Study**

## **Keeping Loudoun Moving**

### **Overview**

Loudoun County, Virginia is one of the fastest growing counties in the nation; its population has doubled since 2000. The unprecedented growth the county has experienced over the last several decades has resulted in a continued and an ever-increasing strain on its transportation network.

Transportation is one of the most important services provided by government, fulfilling the crucial role of linking people to their jobs, schools, recreation and shopping. Loudoun County adopted its first Countywide Transportation Plan (CTP) in 1995. The CTP was revised in 2001 and again in 2010. The CTP is a planning document that establishes a long-range vision for the county's transportation network and defines policies that provide for the successful implementation of that network.

The county's road network is constantly changing. Segments of the network are being designed and constructed by the Virginia Department of Transportation (VDOT), the county, the private development community through proffers and conditions, and through partnerships amongst those entities. This quilt-like approach to road construction led to a patchwork roads network which resulted in missing segments and bottlenecks.

In January 2012, a new Board of Supervisors took office. Many of the newly-elected Board members made funding an improved transportation network a major priority. They were especially interested in identifying and completing missing links in the county.



# **Eastern Loudoun Transportation Study Keeping Loudoun Moving**

## **Submission**



# **Eastern Loudoun Transportation Study**

## ***Keeping Loudoun Moving***

### Submission

At its first business meeting in January 2012, the newly-elected Loudoun County Board of Supervisors brought forth an initiative to address Loudoun County's road network. The Chairman introduced the initiative that directed county staff to develop a report for the Board of Supervisors that would identify deficiencies and missing links in the Eastern Loudoun transportation network, in the fastest growing area of the county.

The report would provide information on:

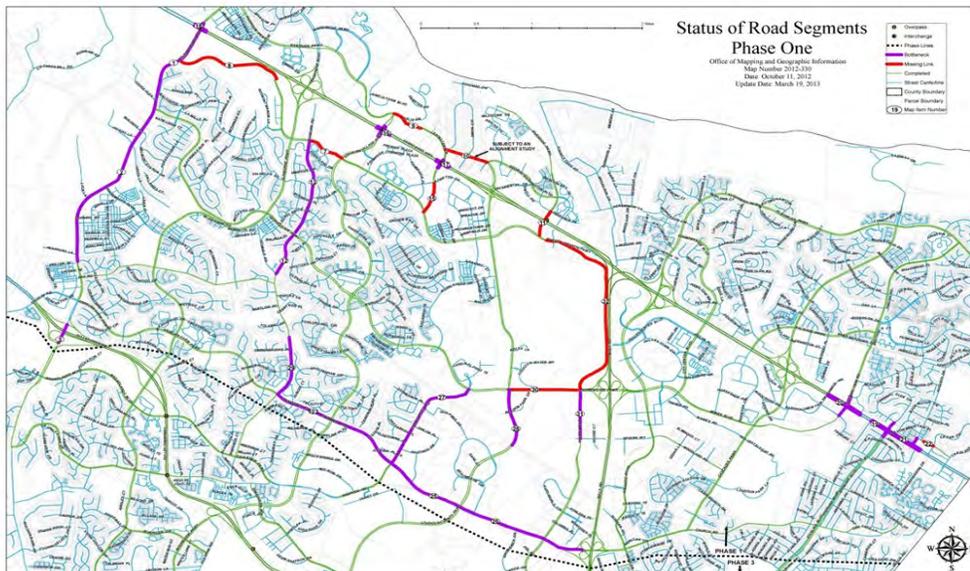
- network deficiencies,
- missing links in the network,
- an estimated cost to build the missing links and address the network deficiencies;
- an inventory of development proffers including an analysis of the timing of the proffers;
- an analysis of the right-of-way availability; and
- a summary of potential funding sources.

The Board unanimously approved the motion to direct staff to prepare such a report.

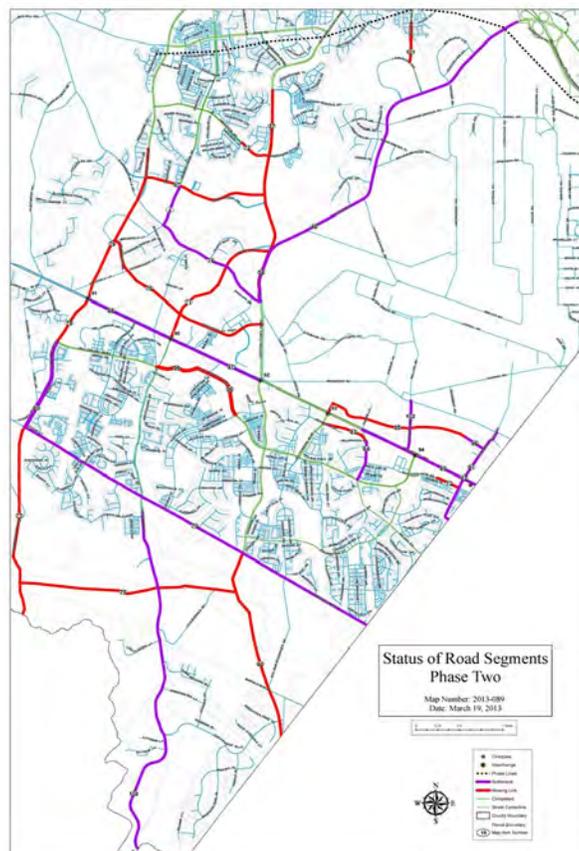
**THE CHALLENGE:** Using the Geographic Information System (GIS), staff in the Office of Mapping created a base map that served as a starting point for the project – to study all roads included in the Eastern Loudoun Transportation Study. Staff in the Department of Transportation and Capital Infrastructure and the Department of Building and Development analyzed the existing condition of each road included in the Countywide Transportation Plan (CTP) within the study area. The road segments were categorized and mapped as completed (roads built to at least an interim condition as described in the CTP), a bottleneck (roads that required widening, intersection improvements or an interchange as described in the CTP), or a missing link. Ultimately, staff analyzed 103 road segments that fell into those categories.

Since this study would be conducted by county staff who already had full-time responsibilities, and given the 24-month-timeframe, staff estimated it would take to complete the analysis of the 103 road segments, the study area was divided into three distinct phases.

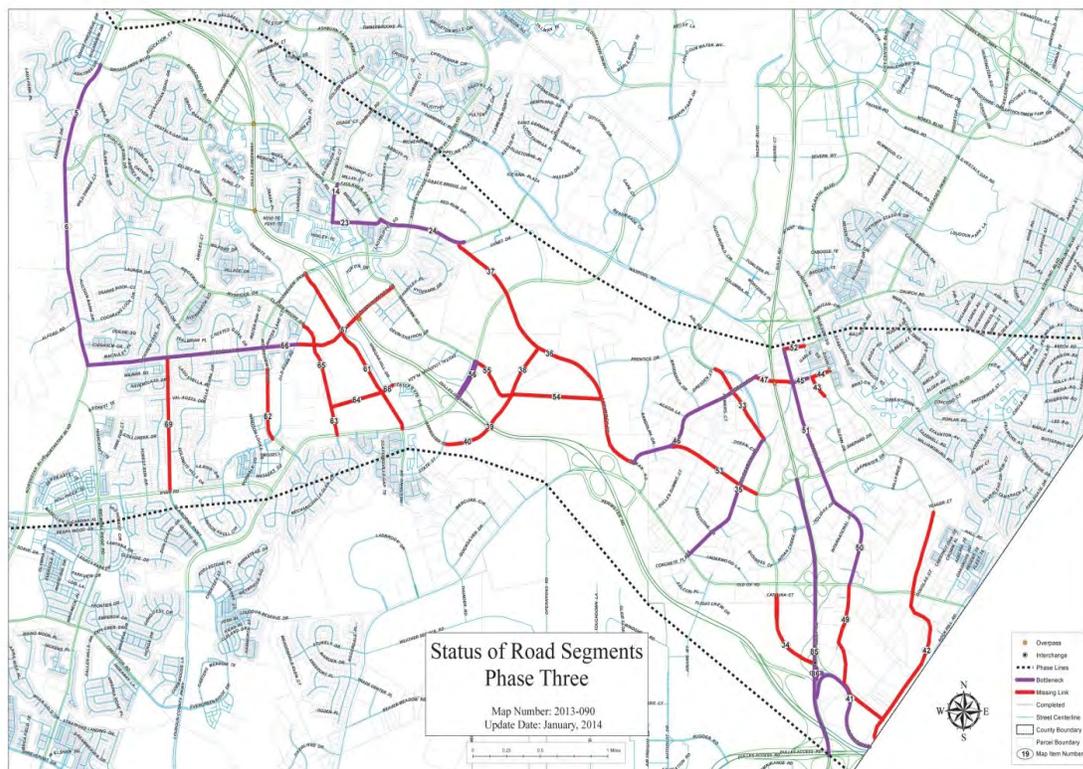
- **Phase I** (northern third of the study area) included the area closest to build-out as it had been subjected to the most intense zoning activity, thus it included the largest number of transportation proffers.



- **Phase 2** (southern third of the study area) was determined to have the next largest number of transportation proffers.



- **Phase 3** (mid-section of the study area which includes Dulles Airport) was deemed to have fewer opportunities for the county to capitalize on cash proffers.



NOTE: It is anticipated that the location of the Greenway Transit Connector, Segment 67, will be modified by ZCPA applications that will be submitted in 2014 for Moorefield Station and Loudoun Station.

By phasing the study, staff would be able to provide information to the Board incrementally rather than in one large document. Staff provided its initial report to the Board in March 2012, followed by Phase 1 information in November, 2012, Phase 2 information in April, 2013 and Phase 3 information in January, 2014.

**THE RESEARCH METHOD:** The process to research the right-of-way status and availability of proffered/ conditions was a labor-intensive, manual process performed by staff in Zoning Administration. The complexity of researching the road segments depended on the number of parcels per segment, which ranged from 5 to 31 parcels. The age of the land development applications was another factor because some of the records had been archived.

The research process for each segment included:

1. Creating a working map of the assigned segment(s) with the rezoning layer turned on.
2. Identifying each parcel using the county's WebLogis system to obtain the PIN #, owner name and land record information.
3. Accessing the Circuit Court online land records to obtain the corresponding deeds and plats.
4. Using the county's Land Management Information System (LMIS) to determine if any of the parcels were subject to legislative or ministerial applications; if so, obtain the applicable proffers and conditions. LMIS was also used to identify active rezoning and special exception applications and to obtain the current balance of any cash contributions that the county received for a particular road segment.
5. Researching Laserfiche which is where some of the county's land development applications have been archived (used fairly often as a research tool).
6. Using LMIS to determine whether construction plans for improvements to the road segment have already been prepared. If so, access the bonds database to obtain the relevant bond information.
7. Reviewing county and VDOT project status reports to determine if the assigned road improvement is being worked on by either entity.
8. Writing the segment analysis and summary sheet information.
9. Preparing the vicinity map for each segment; annotating the map with a synopsis of the right-of-way status and whether there are proffers and/or conditions that provide for right-of-way dedication, construction or cash contributions.
10. Submitting the segment analysis to managers in Building & Development and the Department of Transportation and Capital Infrastructure for review.

**THE PRODUCT:** The final report includes a map of all the road segments in the Eastern Loudoun

Transportation Study area that are included in the CTP. Each segment is categorized as completed, a missing

link or a bottleneck. For each of the 103 missing link/bottleneck road segments there is a summary sheet

that provides:

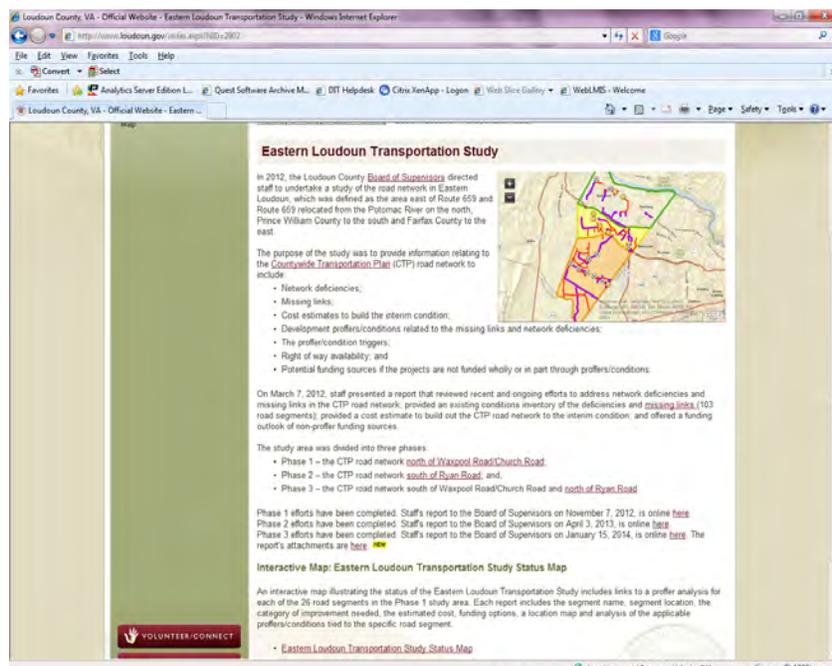
- the segment location,
- a pre-engineered cost estimate,
- funding options,
- right-of-way availability (whether the right-of-way is proffered or reserved and the event that triggers the right of way dedication),
- cash or construction proffers associated with the segment to include triggers and whether the proffers contain a cash-in-lieu of construction option in case the segment is built by others, and
- the current status activity related to the road segment.

The report also contains a vicinity map for each segment that identifies the adjacent parcels, and

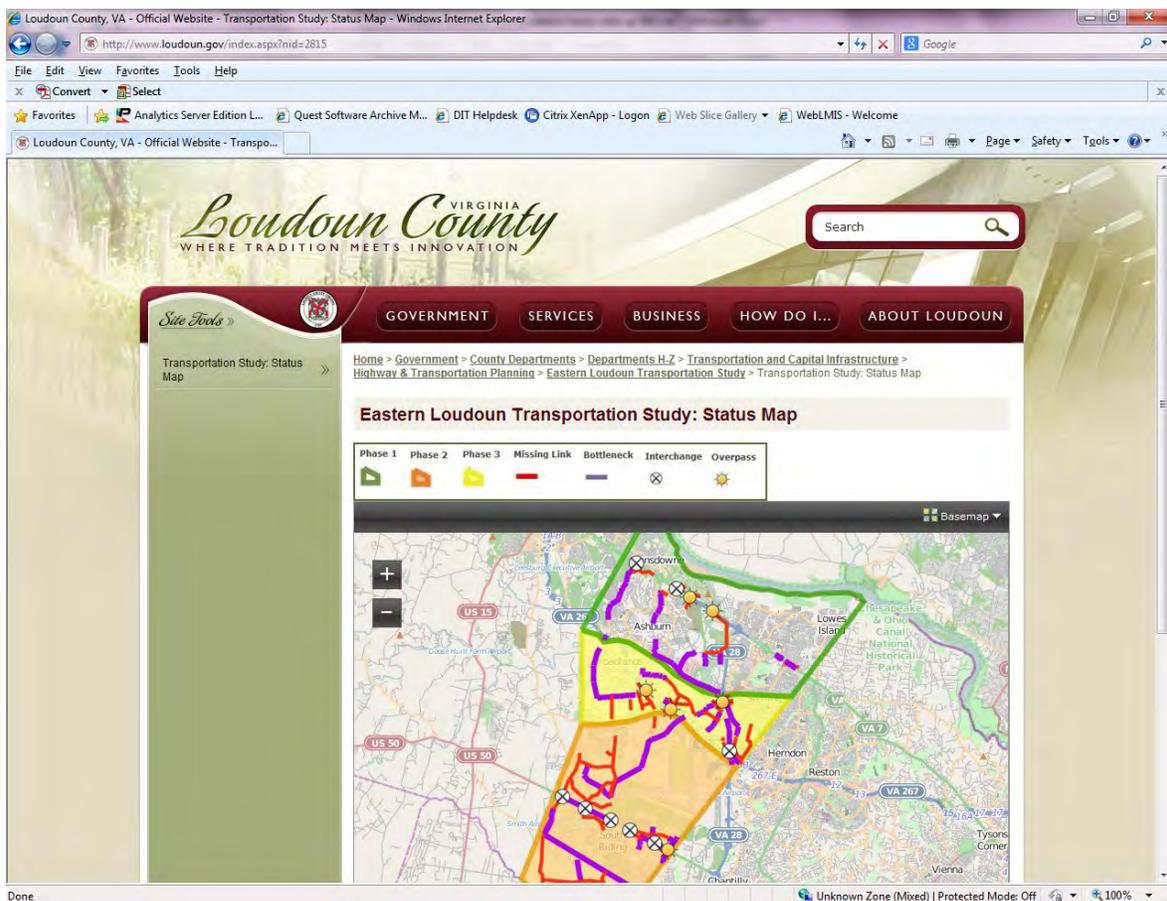
includes a detailed analysis of each parcel and the applicable proffers and/or conditions. The Phase 1 report

has 156 pages, Phase 2 has 298 pages and the Phase 3 report has 337 pages. The material is accessible via the

county's web site at [www.loudoun.gov/easternloudountransportationstudy](http://www.loudoun.gov/easternloudountransportationstudy).



When the Phase 1 report was presented to the Board of Supervisors at its November 2012 Business Meeting, Board members found the information provided to be of such value that staff was asked to make all of the information readily available to the public on the county website. The report was posted to [www.loudoun.gov/easternloudountransportationstudy](http://www.loudoun.gov/easternloudountransportationstudy). Staff also prepared an interactive map of the study area whereby the user is able to click on one of the road segments identified as a missing link or bottleneck and access the specific summary page and supporting document from the report. The information is readily available to anyone who has an interest in the status of a road segment, including the general public, prospective home purchasers, the development community and county staff. Below you will find the interactive map:



**THE EFFORT:** When staff was asked to work on this project, staff estimated it would take one day per segment. In reality, it took 1-5 days per segment depending on the complexity. The effort could not have been accomplished without team work. Four county agencies— the Department of Transportation and Capital Infrastructure, Office of Mapping, Zoning Administration and Building & Development— worked together to produce the study and present it to the public on the county website.

Currently, the completed Eastern Loudoun Transportation Study is frequently used by Board members, VDOT, county staff, the development community and residents of Loudoun County. It was a useful tool in the preparation of the Adopted FY 2015 Capital Improvement Program, which provides funding for some of the missing links.



# **Eastern Loudoun Transportation Study Keeping Loudoun Moving**

**Examples of the Interactive Map**



The box opens when you click on a road segment.

This is the Ashburn Village Boulevard to Lexington Drive segment.

The screenshot shows a web browser window displaying the Loudoun County website. The browser's address bar shows the URL [www.loudoun.gov/index.aspx?nid=2815](http://www.loudoun.gov/index.aspx?nid=2815). The page features a map of Loudoun County, VA, with various road segments highlighted in different colors. A legend at the top of the map area includes categories: Phase 1 (green), Phase 2 (orange), Phase 3 (yellow), Missing Link (red), Bottleneck (purple), Interchange (blue), and Overpass (grey). A pop-up window is open over the map, displaying the following information:

- Missing Link: Riverside Pkwy**
- Segment: Ashburn Village Blvd to Lexington Dr
- Phase: 1
- Item #: 9
- Info Link: [More info](#)
- Zoom to: [button]

Below the map, there is a section titled **Map Notes** with the following text:

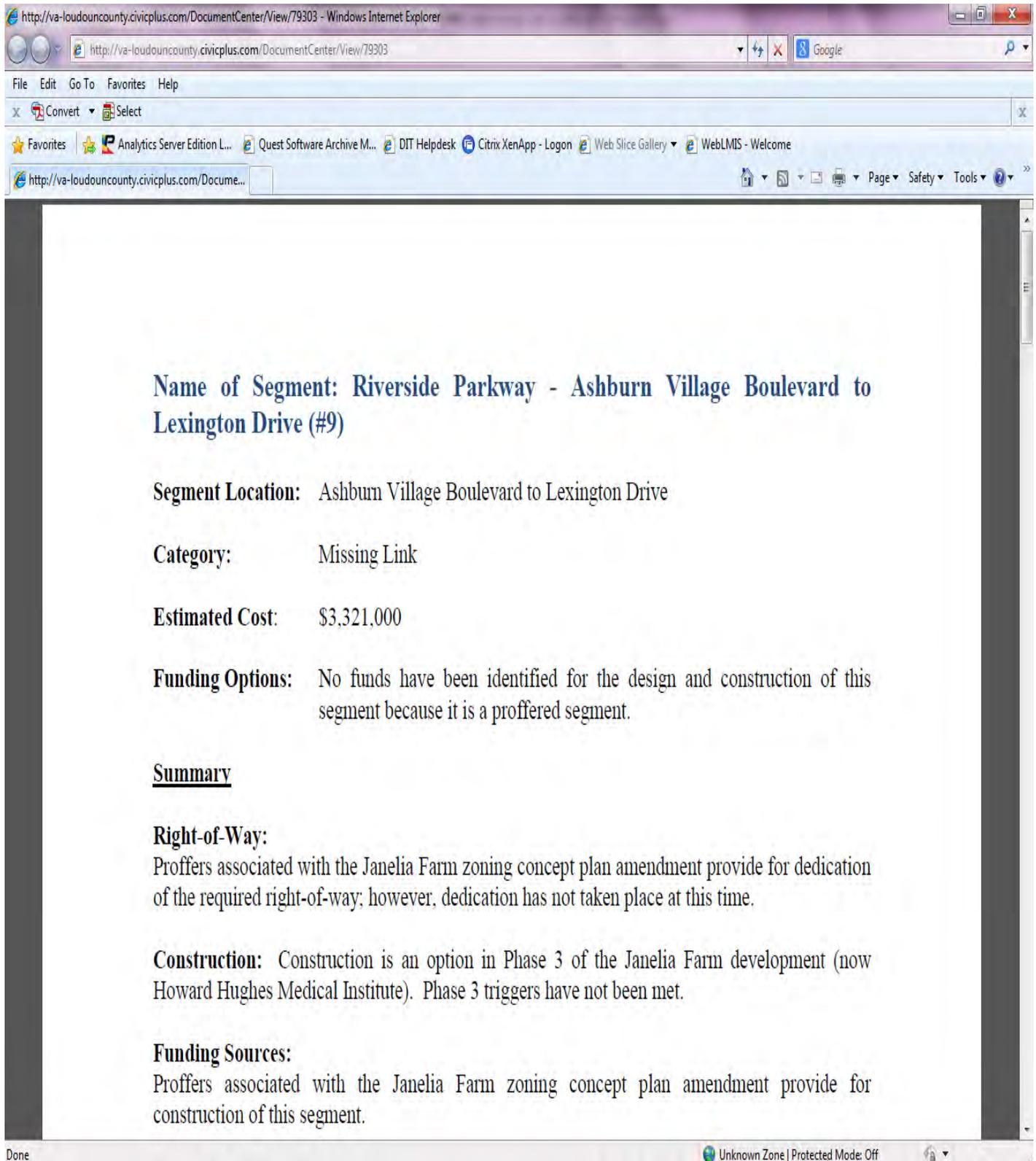
Click on the Road Segment to open the Segment Specific report.  
*(currently only 27 of the segments have detailed reports, as the reports are completed they will be added to this application)*

Click [here](#) for the complete Board of Supervisors Information Item from the November 7, 2012 meeting.

The page also includes a sidebar with social media links for Facebook, Twitter, YouTube, and RSS, as well as an email update sign-up. The footer contains navigation links for Home, Contact Us, Sitemap, Accessibility, Privacy Policy, and Copyright Notices, along with the text "Powered by CivicPlus". The bottom of the browser window shows the Windows taskbar with the Start button, several application icons, and the system tray displaying the time as 12:06 PM on 5/30/2014.

Results from clicking more information on the pop-up box.

This example is Ashburn Village Boulevard to Lexington Drive.



The screenshot shows a Windows Internet Explorer browser window displaying a document from the Loudoun County CivicPlus system. The address bar shows the URL: http://va-loudouncounty.civicplus.com/DocumentCenter/View/79303. The document content includes the following information:

**Name of Segment:** Riverside Parkway - Ashburn Village Boulevard to Lexington Drive (#9)

**Segment Location:** Ashburn Village Boulevard to Lexington Drive

**Category:** Missing Link

**Estimated Cost:** \$3,321,000

**Funding Options:** No funds have been identified for the design and construction of this segment because it is a proffered segment.

**Summary**

**Right-of-Way:** Proffers associated with the Janelia Farm zoning concept plan amendment provide for dedication of the required right-of-way; however, dedication has not taken place at this time.

**Construction:** Construction is an option in Phase 3 of the Janelia Farm development (now Howard Hughes Medical Institute). Phase 3 triggers have not been met.

**Funding Sources:** Proffers associated with the Janelia Farm zoning concept plan amendment provide for construction of this segment.

View approaching Ashburn Village Boulevard



The box opens when you click on a road segment.

This segment Old Ox Road Route 606.

The screenshot shows a web browser window displaying the Loudoun County website. The page title is "Eastern Loudoun Transportation Study: Status Map". The navigation menu includes "GOVERNMENT", "SERVICES", "BUSINESS", "HOW DO I...", and "ABOUT LOUDOUN". The breadcrumb trail is: Home > Government > County Departments > Departments H-Z > Transportation and Capital Infrastructure > Highway & Transportation Planning > Eastern Loudoun Transportation Study > Transportation Study: Status Map.

The main content area features a legend for the map with categories: Phase 1 (green), Phase 2 (orange), Phase 3 (yellow), Missing Link (red), Bottleneck (purple), Interchange (blue), and Overpass (sun icon). Below the legend is a map of Loudoun County, Virginia, showing various road segments color-coded according to the legend. A pop-up window titled "Bottleneck: Old Ox Rd" is open over a segment on the map. The pop-up contains the following information:

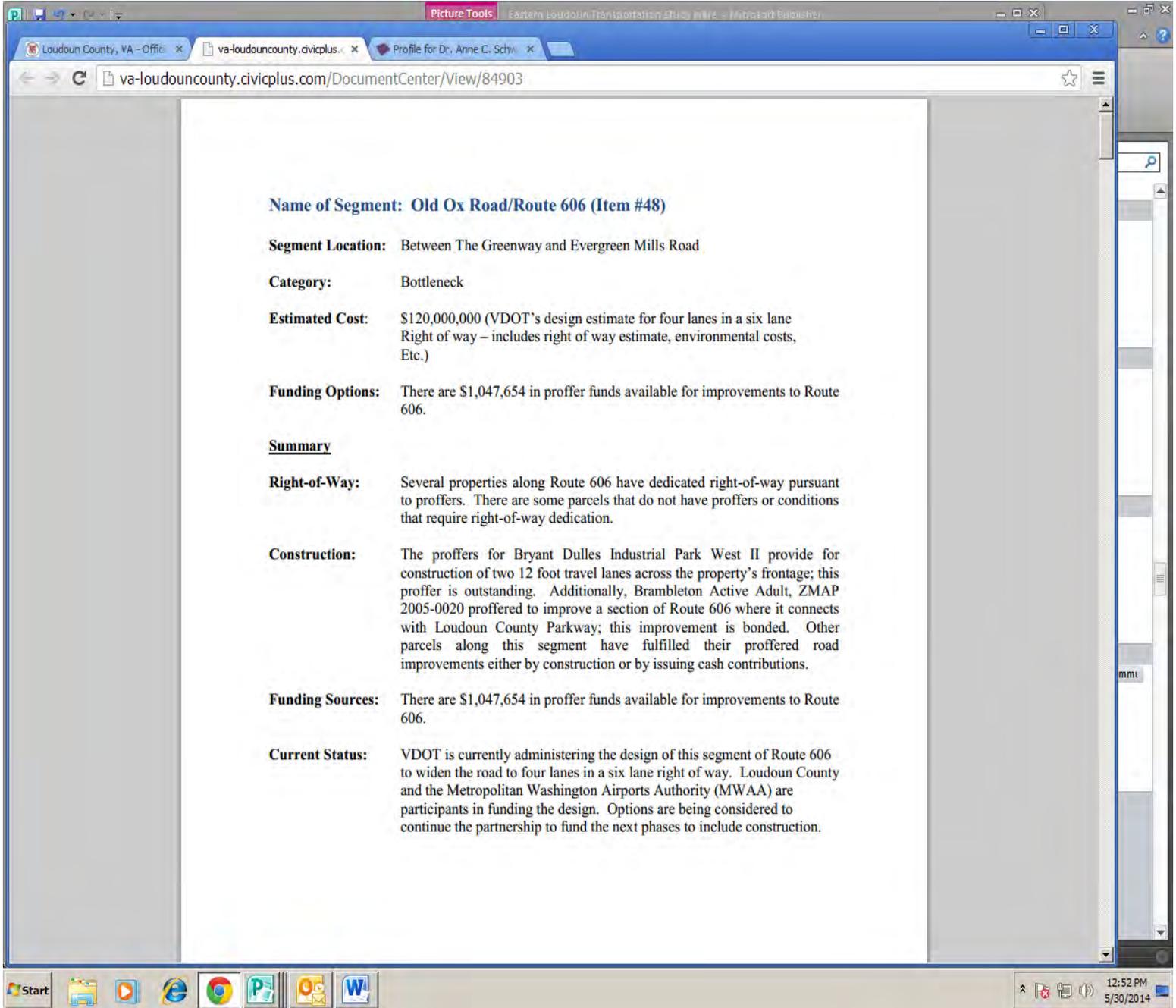
- Segment: The Greenway to Evergreen Mills Rd
- Phase: 2
- Item #: 48
- Info Link: [More info](#)
- Zoom to: [button]

Below the map, there are "Map Notes" which state: "Click on the Road Segment to open the Segment Specific report. (currently only 27 of the segments have detailed reports, as the reports are completed they will be added to this application)". A link is provided for the complete Board of Supervisors Information Item from the November 7, 2012 meeting.

The browser's address bar shows the URL: www.loudoun.gov/index.aspx?nid=2815. The Windows taskbar at the bottom shows the Start button, several application icons, and the system tray with the date and time: 12:51 PM, 5/30/2014.

Results from clicking more information on the pop-up box.

This example is Old Ox Road Route 606.





# **Eastern Loudoun Transportation Study Keeping Loudoun Moving**

## **Media Coverage**







**Grand Opening  
Spring Luxury Package**  
LIMITED TIME OFFER

Exclusively At  
**Melody Farms**  
A Brand New Community Near D.C.



## Supervisors initiate eastern Loudoun traffic study

Monday, May. 6, 2013 by Staff Report | 4 comments | Email this story



The Loudoun Board of Supervisors have launched an Eastern Loudoun Transportation Study to examine missing road links, network deficiencies, right-of-way availability and funding options.

Supervisor Matt Letourneau (R-Dulles) said the area studied will include roads east of Route 659 from the Potomac River to the north to Prince William County in the south and Fairfax County in the east. In his April constituent newsletter, Letourneau noted the project was divided into three phases with reports given to the board on each study phase.

“Phase Two of the study focused on Dulles South and was just completed and presented to the Board. This section includes a review of roads and missing links south of Ryan Road,” Letourneau notes. “Phase two outlines 36 road segments, one third of which are funded by proffers.”

The County has set up a website for the public to view the study and see specifics for each road segment at <http://www.loudoun.gov/easternloudountransportationstudy> The site includes an interactive map which you can click on road segments for information about funding, construction, and other details.

Government /





# **Eastern Loudoun Transportation Study Keeping Loudoun Moving**

**Recommendation Letter from  
State Delegate J. Randall Minchew**





J. RANDALL MINCHEW  
POST OFFICE BOX 385  
LEESBURG, VIRGINIA 20178

TENTH DISTRICT

COMMONWEALTH OF VIRGINIA  
HOUSE OF DELEGATES  
RICHMOND

May 28, 2014

COMMITTEE ASSIGNMENTS:  
COURTS OF JUSTICE  
TRANSPORTATION

Mr. Tim Hemstreet  
County Administrator  
County of Loudoun  
Loudoun County Governmental Center  
1 Harrison Street, SE, 5<sup>th</sup> Floor  
Leesburg, VA 20175

Re: Recommendation for VACo Achievement Award – Eastern Loudoun Transportation Study

Dear Mr. Hemstreet,

At its first meeting in 2012, the Loudoun County Board of Supervisors directed staff to prepare a detailed Eastern Loudoun Transportation Study that would analyze existing roads, “missing links”, right-of-way needs, relevant proffer obligations, and funding opportunities. It was an ambitious assignment and many of us who have been involved in Loudoun County transportation planning matters for years thought that this study, while commendable, would yield yet-another study that would wind up on a bookshelf and not be used for strategic public policy implementation. Loudoun County staff professionals with the Department of Transportation and Capital Infrastructure as supported by a number of other county departments took this assignment very seriously and, on March 7, 2012 presented the Board with a detailed work plan for preparation and delivery of a three-part report. Copies of pertinent Board action items are attached.

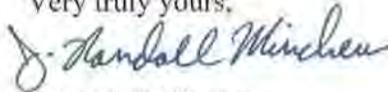
Over the course of the next 2 ½ years, a select staff team, led by Terrie Laycock, produced what is in my opinion, the finest staff work I have ever seen in over 20 years of working in Loudoun County. Phase I, analyzing the Countywide Transportation Plan (CTP) road network north of Waxpool Road/Church Road, was delivered on November 7, 2012; Phase II, analyzing the CTP road network south of Ryan Road, was delivered on April 3, 2013; and Phase III, analyzing the CTP road network south of Waxpool Road/Church Road and north of Ryan Road, was delivered on January 15, 2014. This three-part staff report integrates land use planning and zoning, proffer administration, transportation planning, economic development, and fiscally-prudent capital project management into a highly-readable and solution-oriented report. It basically provides a sound blueprint for addressing one of the most nettlesome problems we have in our County, namely the “missing links” in our CTP road network that confound commuters, waste time and gas, and negatively affect our economic development efforts.

Moreover, this report will provide critical assistance to the Board in using the approximately \$124,444,236 (April 30, 2014 balance) in Loudoun cash proffer money now sitting in a designated County Treasurer account drawing a paltry 0.20% interest return. While not all of this collected cash proffer money is earmarked for transportation improvements, a sizable portion of it is. This three-part Eastern Loudoun Transportation Study provides a solid set for recommendations for the Board of Supervisors determine how to expend this money wisely and use it for cooperative road construction and funding opportunities in coordination with federal, state, and private authorities.

I would respectfully submit that this staff effort and superb final product be submitted for the 2014 VACo Achievement Award. The Board of Supervisors deserves great credit for its leadership in directing that this effort take place and the Loudoun County Staff Team that researched, wrote, and published this report deserve commendation.

In appreciation of your work for Loudoun County and with best personal regards, I remain

Very truly yours,



J. Randall Minchew  
Member, Virginia House of Delegates, 10th District  
Loudoun, Clarke, and Frederick Counties

*Enclosures*

cc: Joe Krobath, Director, Department of Transportation and Capital Infrastructure  
Terrie Laycock, Special Project Coordinator, Department of Transportation and Capital Infrastructure  
Susan Glass, Program Manager, Department of Transportation and Capital Infrastructure